

GenCore version 4.5
Copyright (c) 1993 - 2000 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: December 27, 2001, 16:53:19 ; Search time 41.26 Seconds
(without alignments)

420.096 Million cell updates/sec

Title: US-09-830-647-2
Perfect score: 1206
Sequence: 1 MNSGAMRHSKHFQGIQV.....LKKPFVKVEDMSOSPAPHLM 234

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 522463 seqs, 74073290 residues

Total number of hits satisfying chosen parameters: 522463

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A.Geneseq.1101.*
1: /SIDS2/gcgdata/geneseq/geneseqp/AA1980.DAT:*
2: /SIDS2/gcgdata/geneseq/geneseqp/AA1981.DAT:*
3: /SIDS2/gcgdata/geneseq/geneseqp/AA1982.DAT:*
4: /SIDS2/gcgdata/geneseq/geneseqp/AA1983.DAT:*
5: /SIDS2/gcgdata/geneseq/geneseqp/AA1984.DAT:*
6: /SIDS2/gcgdata/geneseq/geneseqp/AA1985.DAT:*
7: /SIDS2/gcgdata/geneseq/geneseqp/AA1986.DAT:*
8: /SIDS2/gcgdata/geneseq/geneseqp/AA1987.DAT:*
9: /SIDS2/gcgdata/geneseq/geneseqp/AA1988.DAT:*
10: /SIDS2/gcgdata/geneseq/geneseqp/AA1989.DAT:*
11: /SIDS2/gcgdata/geneseq/geneseqp/AA1990.DAT:*
12: /SIDS2/gcgdata/geneseq/geneseqp/AA1991.DAT:*
13: /SIDS2/gcgdata/geneseq/geneseqp/AA1992.DAT:*
14: /SIDS2/gcgdata/geneseq/geneseqp/AA1993.DAT:*
15: /SIDS2/gcgdata/geneseq/geneseqp/AA1994.DAT:*
16: /SIDS2/gcgdata/geneseq/geneseqp/AA1995.DAT:*
17: /SIDS2/gcgdata/geneseq/geneseqp/AA1996.DAT:*
18: /SIDS2/gcgdata/geneseq/geneseqp/AA1997.DAT:*
19: /SIDS2/gcgdata/geneseq/geneseqp/AA1998.DAT:*
20: /SIDS2/gcgdata/geneseq/geneseqp/AA1999.DAT:*
21: /SIDS2/gcgdata/geneseq/geneseqp/AA2000.DAT:*
22: /SIDS2/gcgdata/geneseq/geneseqp/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1206	100.0	234	21	Human H37 amino ac
2	1170	97.0	674	21	Human ORFX ORF2246
3	1170	97.0	674	21	Human H37 amino ac
4	308	25.5	60	22	Peptide #6283 enco
5	308	25.5	60	22	Peptide #7370 enco
6	281	23.3	55	22	Peptide #6848 enco
7	259	21.5	49	22	Peptide #5372 enco
8	259	21.5	49	22	Peptide #5549 enco
9	208	17.2	170	22	Human protein sequ
10	96	8.0	257	22	Group B Streptococ
11	93.5	7.8	1435	20	POLC gene product

12	93.5	7.8	1435	22	AAH31934	Amino acid sequenc
13	89	7.4 <td>1087</td> <td>20 <td>AAV19935</td> <td>B. burgdorferi ant</td> </td>	1087	20 <td>AAV19935</td> <td>B. burgdorferi ant</td>	AAV19935	B. burgdorferi ant
14	89	7.4 <td>1119</td> <td>20 <td>AAV19934</td> <td>B. burgdorferi ant</td> </td>	1119	20 <td>AAV19934</td> <td>B. burgdorferi ant</td>	AAV19934	B. burgdorferi ant
15	88	7.3 <td>700</td> <td>12 <td>AAH13227</td> <td>Novel endoglucanase</td> </td>	700	12 <td>AAH13227</td> <td>Novel endoglucanase</td>	AAH13227	Novel endoglucanase
16	87.5	7.3 <td>1442</td> <td>22 <td>AAH82479</td> <td>S. epidermidis ope</td> </td>	1442	22 <td>AAH82479</td> <td>S. epidermidis ope</td>	AAH82479	S. epidermidis ope
17	87	7.2 <td>617</td> <td>12 <td>AAH15241</td> <td>S. laetus endol cor</td> </td>	617	12 <td>AAH15241</td> <td>S. laetus endol cor</td>	AAH15241	S. laetus endol cor
18	86	7.1	947	19 <td>AAH81168</td> <td>Transcriptional re</td>	AAH81168	Transcriptional re
19	86	7.1	947	20 <td>AAV07114</td> <td>WR9904265 Seq ID N</td>	AAV07114	WR9904265 Seq ID N
20	85	7.0	536	21 <td>AAV76007</td> <td>Murine RIP protein</td>	AAV76007	Murine RIP protein
21	85	7.0	536	22 <td>AAH55946</td> <td>Skin cell protein,</td>	AAH55946	Skin cell protein,
22	85	7.0	714	21 <td>AAV70209</td> <td>Murine TANGO 130 p</td>	AAV70209	Murine TANGO 130 p
23	85	7.0	976	17 <td>AAH02289</td> <td>Mouse neuron restir</td>	AAH02289	Mouse neuron restir
24	84.5	7.0	299	16 <td>AAH75416</td> <td>Rat regucalcin, a</td>	AAH75416	Rat regucalcin, a
25	84.5	7.0	343	21 <td>AAH60518</td> <td>Arabidopsis thailia</td>	AAH60518	Arabidopsis thailia
26	84.5	7.0	347	22 <td>AAH81684</td> <td>S. epidermidis ope</td>	AAH81684	S. epidermidis ope
27	84.5	7.0	347	22 <td>AAH82087</td> <td>S. epidermidis ope</td>	AAH82087	S. epidermidis ope
28	84.5	7.0	412	20 <td>AAV49151</td> <td>Amino acid sequenc</td>	AAV49151	Amino acid sequenc
29	84.5	7.0	425	20 <td>AAV49248</td> <td>N-terminal region</td>	AAV49248	N-terminal region
30	84.5	7.0	425	20 <td>AAV32187</td> <td>N-terminal choline</td>	AAV32187	N-terminal choline
31	84.5	7.0	887	22 <td>AAH39431</td> <td>Human polypeptide</td>	AAH39431	Human polypeptide
32	84.5	7.0	2781	21 <td>AAV57453</td> <td>Human transcriptio</td>	AAV57453	Human transcriptio
33	84.5	7.0	2907	21 <td>AAV57452</td> <td>Human transcriptio</td>	AAV57452	Human transcriptio
34	84	7.0	590	21 <td>AAV76123</td> <td>Murine RIP protein</td>	AAV76123	Murine RIP protein
35	84	7.0	590	22 <td>AAH56062</td> <td>Skin cell protein,</td>	AAH56062	Skin cell protein,
36	84	7.0	763	21 <td>AAV79154</td> <td>Mouse protein kina</td>	AAV79154	Mouse protein kina
37	84	7.0	786	21 <td>AAH69163</td> <td>Amino acid sequenc</td>	AAH69163	Amino acid sequenc
38	84	7.0	787	21 <td>AAV76079</td> <td>Murine protein kin</td>	AAV76079	Murine protein kin
39	84	7.0	787	22 <td>AAH56018</td> <td>Skin cell protein,</td>	AAH56018	Skin cell protein,
40	83.5	6.9	317	21 <td>AAH21891</td> <td>Arabidopsis thailia</td>	AAH21891	Arabidopsis thailia
41	83	6.9	996	22 <td>AAH39322</td> <td>Human polypeptide</td>	AAH39322	Human polypeptide
42	83	6.9	1023	22 <td>AAH41108</td> <td>Human polypeptide</td>	AAH41108	Human polypeptide
43	82.5	6.8	273	18 <td>AAH20667</td> <td>H. pylori cytoplasm</td>	AAH20667	H. pylori cytoplasm
44	82.5	6.8	300	18 <td>AAH20098</td> <td>H. pylori cytoplasm</td>	AAH20098	H. pylori cytoplasm
45	82.5	6.8	746	22 <td>AAH81779</td> <td>S. epidermidis ope</td>	AAH81779	S. epidermidis ope

ALIGNMENTS

RESULT 1
ID AAB03759 standard; Protein; 234 AA.
XX AAB03759;
AC
XX
XX
DT 04-OCT-2000 (first entry)
XX
DE Human H37 amino acid sequence #2.
XX
KW H37; human; Cdc7 regulatory subunit; cytosolic; proliferative; cancer;
XX anti-proliferative; replication regulator; stem cell.
XX
XX Homo sapiens.
OS
XX
XX WO200026250-A1.
XX
XX 11-MAY-2000.
XX
XX 01-NOV-1999; 99WO-JP06076.
XX
XX 30-OCT-1998; 98JP-0311408.
XX
XX (NISC-) JAPAN SCI & TECHNOLOGY CORP.
XX (ARAI/) ARAI K.
XX (MASA/) MASA H.
XX Arai K, Masai H;
XX
XX WPI; 2000-365580/31.
XX N-PSDB; AAA53484.
XX
XX Human H37 proteins with a Cdc7 activity regulatory subunit, for
XX controlling cell replication and cell proliferation, useful in treating

PT cancers and diseases due to abnormal production of stem cells -
 XX
 PS Claim 2; Page 46-47; 55pp; Japanese.
 CC The present sequence represents a human H37 protein sequence. H37 is a
 CC protein with a Cdc7 activity regulatory subunit. The invention relates to
 CC two H37 protein and nucleotide sequences. H37 proteins exhibit
 CC cytoskeletal, proliferative, anti-proliferative, and cell replication
 CC regulatory activities. The proteins, encoded genes and DNA fragments are
 CC useful in treating cancers and other diseases resulting from abnormal
 CC production of stem cells. Antibodies directed against one of the H37
 CC proteins can be used to inhibit cell proliferation.
 XX
 SQ Sequence 234 AA:
 Query Match 100.0%; Score 1206; DB 21; Length 234;
 Best Local Similarity 100.0%; Pred. No. 1.6e-113;
 Matches 234; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MNSGAMRHSKGFPOGCIQVKNKRRPSLKLKTDNRPKSKCPKPMGVFLDPSVTI 60
 DB 1 mnsгамrһskgftqgglqvkneknrpslktdnrpkсксрkрmgvfldpsvти 60
 OY 61 SEKIQKIDKLGGRVEEFLSKDISYLSNKKKPAQOTLCRISPPSPSAVTAETTSPI 120
 DB 61 sekіqkіdkgгveeflskdіsylysnkkеkрaqotlсrіspspesavtaettsрh 120
 OY 121 PSHDGSFSPDVTCLSRGKLLVEKAKDHDFTPSNLSLNSWGVKILHDDIRYITE 180
 DB 121 pshdgsfksрdvtсlsrgkllevekаdhdftpsnlslnswgvkіlhddіryіte 180
 OY 181 OKKKELYLLKKSSTSVROGKRVSGAOKRTGRLKRPYKVEDMSQSPAVHLM 234
 DB 181 okkkelуllkkstsvrdgkrvsgаokrtgrlkrруkvedmsqspavhlm 234
 RESULT 2
 ID AAB42482 standard; Protein; 674 AA.
 XX
 AC AAB42482;
 XX
 DT 08-FEB-2001 (first entry)
 DE Human ORFX ORF2246 polypeptide sequence SBD ID NO:4492.
 XX
 KW Human; open reading frame; ORFX; detection: cytoskeletal; hepatotropic;
 KW vulnereary; antipapkinsonian; noctropic; neuroprotective;
 KW anticonvulsant; osteopathic; antilarthritic; immunosuppressant; cardiant;
 KW immunostimulant; thrombolytic; coagulant; vasotrophic; antidiabetic;
 KW hypotensive; dermatological; immunosuppressive; antinflammatory;
 KW antiviral; antibacterial; antifungal; antirheumatic; antihypertoid;
 KW antianemic; gene therapy; cancer; proliferative disorder; hypertension;
 KW neurodegenerative disorder; diabetes mellitus; graft vs host disease;
 KW cardiovascular disease; osteoarthritis; graft vs host disease;
 KW cholesterol ester storage; systemic lupus erythematosus; infection;
 KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
 KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
 KW bone damage; cartilage damage; antinflammatory disease; coagulation;
 KW thrombolis; contraceptive.
 XX
 OS Homo sapiens.
 XX
 PN WO200058473-A2.
 XX
 PD 05-OCT-2000.
 XX
 PF 31-MAR-2000; 2000MO-US08621.
 XX
 PR 31-MAR-1999; 99US-0127607.
 XX
 PR 02-APR-1999; 99US-0127636.
 XX
 PR 05-APR-1999; 99US-0127728.
 PR

PR 30-MAR-2000; 2000US-0540763.
 XX
 PA (CURA-) CUBAGEN CORP.
 XX
 PI Shimkels RA, Leach M;
 XX
 DR WPI: 2000-602362/57.
 DR N-PSDB: AAC76691.
 XX
 PT Novel nucleic acids and peptides derived from open reading frame X,
 PT useful for treating e.g. cancers, proliferative disorders,
 PT neurodegenerative disorders and cardiovascular disease -
 XX
 PS Claim 11; Page 3676-3677; 5507pp; English.
 XX
 CC AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB43397,
 CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
 CC sequences have activities such as: cytoskeletal; hepatotropic; vulnereary;
 CC antipapkinsonian; noctropic; neuroprotective;
 CC osteopathic; anticonvulsant; antilarthritic; immunosuppressant;
 CC immunostimulant; cardiant; thrombolytic; coagulant; vasotrophic;
 CC antidiabetic; hypotensive; dermatological; antiviral; immunosuppressive;
 CC antinflammatory; antibacterial; antifungal; antirheumatic;
 CC antihypertoid; and antianemic. The sequences can be used for determining
 CC the presence of or predisposition to, or preventing or treating
 CC pathological conditions associated with an ORFX-associated disorder. The
 CC nucleic acids can be used to express ORFX proteins in gene therapy
 CC vectors. The proteins and nucleic acids may be used to treat cancers,
 CC proliferative disorders, neurodegenerative disorders, osteoarthritis,
 CC graft vs host disease, cardiovascular disease, diabetes mellitus
 CC hypertension, hypothyroidism, cholesterol ester storage, systemic lupus
 CC erythematosus, severe combined immunodeficiency (SCID), AIDS, viral,
 CC bacterial or fungal infection, malaria, autoimmune disorders, asthma,
 CC allergies, aplastic anaemia, burns, wounds, bone and cartilage damage,
 CC nocturnal haemoglobinuria, antinflammatory disease; to enhance
 CC coagulation; to inhibit thrombolis; and as a contraceptive.
 XX
 SQ Sequence 674 AA:
 Query Match 97.0%; Score 1170; DB 21; Length 674;
 Best Local Similarity 100.0%; Pred. No. 3.1e-109;
 Matches 227; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OY 1 MNSGAMRHSKGFPOGCIQVKNKRRPSLKLKTDNRPKSKCPKPMGVFLDPSVTI 60
 DB 1 mnsгамrһskgftqgglqvkneknrpslktdnrpkсксрkрmgvfldpsvти 60
 OY 61 SEKIQKIDKLGGRVEEFLSKDISYLSNKKKPAQOTLCRISPPSPSAVTAETTSPI 120
 DB 61 sekіqkіdkgгveeflskdіsylysnkkеkрaqotlсrіspspesavtaettsрh 120
 OY 121 PSHDGSFSPDVTCLSRGKLLVEKAKDHDFTPSNLSLNSWGVKILHDDIRYITE 180
 DB 121 pshdgsfksрdvtсlsrgkllevekаdhdftpsnlslnswgvkіlhddіryіte 180
 OY 181 OKKKELYLLKKSSTSVROGKRVSGAOKRTGRLKRPYKVEDMSQ 227
 DB 181 okkkelуllkkstsvrdgkrvsgаokrtgrlkrруkvedmsq 227
 RESULT 3
 ID AAB03758 standard; Protein; 674 AA.
 XX
 AC AAB03758;
 XX
 DT 04-OCT-2000 (first entry)
 DE Human H37 amino acid sequence #1.
 XX
 KW H37; human; Cdc7 regulatory subunit; cytoskeletal; proliferative; cancer;
 KW anti-proliferative; replication regulator; stem cell.
 KW

XX Homo sapiens.
 OS WO200026250-A1.
 PN 11-MAY-2000.
 PD 01-NOV-1999; 99WO-JP06076.
 PF 30-OCT-1998; 98JP-0311408.
 PR (NISC-) JAPAN SCI & TECHNOLOGY CORP.
 PA (ARAI/) ARAI K.
 PA (MASA/) MASAI H.
 PI Arai K, Masai H;
 PI WPI; 2000-365580/31.
 DR N-PSDB; AAI53483.
 XX Human H37 proteins with a Cdc7 activity regulatory subunit, for
 PT controlling cell replication and cell proliferation, useful in treating
 PT cancers and diseases due to abnormal production of stem cells -
 PS Claim 1; Fig 5; 55pp; Japanese.
 XX The present sequence represents a human H37 protein sequence. H37 is a
 CC protein with a Cdc7 activity regulatory subunit. The invention relates to
 CC two H37 protein and nucleotide sequences. H37 proteins exhibit
 CC cytosolic, proliferative, anti-proliferative, and cell replication
 CC regulatory activities. The proteins, encoded genes and DNA fragments are
 CC useful in treating cancers and other diseases resulting from abnormal
 CC production of stem cells. Antibodies directed against one of the H37
 CC proteins can be used to inhibit cell proliferation.
 SQ Sequence 674 AA;

Query Match 97.0%; Score 1170; DB 21; Length 674;
 Best Local Similarity 100.0%; Pred. No. 3.1e-109;
 Matches 227; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 1 MNSGMRHSHGHPGGOYVKNKRNPSLSKTDNRPEKSKCPKLMGVFVFLDPSVTI 60
 DB 1 mmsgmrlshsghpgoqyvkneknpslsktdnrpekskcpkvmgvfvlidpsvtl 60
 OY 61 SEKLOKIDKIDGRIEFLSKDISYLSNKKKFAQTIGRISPPSPESAYTAETSPH 120
 DB 61 seklokdikidgrieeeflskdisylsnkkkfaqtigrisppspesaytaetstph 120
 OY 121 PSHDGSSEKSPDVTCLSGKLLVEKAIKDHDPIPSNSILSNALSMGVKTLHIDIRYITE 180
 DB 121 pshdgssefkspdvtclsvclsrqkllvekaikdhdfipnsilsnalsmgvklhidditryite 180
 OY 181 OKKKELLYLKKSSSTVPRDGSGRVSGAOKTRTGRLKKPPVKEDMSQ 227
 DB -181 qkkkellyllkssstvrpgktrvsgaqktrtgrlkkppvkvedmsq 227

RESULT 4
 AAI19849
 ID AAI19849 standard; Protein; 60 AA.
 AC AAI19849;
 XX 12-OCT-2001 (first entry)
 DE Peptide #6283 encoded by probe for measuring cervical gene expression.
 XX Probe; human; microarray; gene expression; cervical epithelial cell;
 KM cervical cancer.
 OS Homo sapiens.

XX WO200157278-A2.
 XX 09-AUG-2001.
 PD 30-JAN-2001; 2001WO-US00670.
 PF 04-FEB-2000; 2000US-0180312.
 PR 26-MAY-2000; 2000US-0207456.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX (MOLE-) MOLECULAR DYNAMICS INC.
 PA Penn SC, Hanzel DK, Chen W, Rank DR;
 PI WPI; 2001-486901/53.
 DR Human genome-derived single exon nucleic acid probes useful for
 PT analyzing gene expression in human cervical epithelial cells -
 PS Claim 27; SEQ ID No 24675; 487pp; English.
 XX The present invention relates to human single exon nucleic acid probes
 CC (SENP: see AAI10068-AA128459). The present sequence is a peptide encoded
 CC by one such probe. The SENPs are derived from human HeLa cells. The SENPs
 CC can be used to produce a single exon microarray, which can be used for
 CC measuring human gene expression in a sample derived from human cervical
 CC epithelial cells. By measuring gene expression, the probes are therefore
 CC useful in grading and/or staging of diseases of the cervix, notably
 CC cervical cancer.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences.
 SQ Sequence 60 AA;

Query Match 25.5%; Score 308; DB 22; Length 60;
 Best Local Similarity 100.0%; Pred. No. 8.8e-24;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

OY 74 RVEEFLSKDISYLSNKKKFAQTIGRISPPSPESAYTAETSPHPSHDSSFKSPDT 133
 DB 1 rveeflskdisylsnkkkfaqtigrisppspesaytaetstphpshdssfkspdt 60

RESULT 5
 AAI33333
 ID AAI33333 standard; Protein; 60 AA.
 AC AAI33333;
 XX 17-OCT-2001 (first entry)
 DE Peptide #7370 encoded by probe for measuring placental gene expression.
 XX Probe; microarray; human; placenta; antenatal diagnosis;
 KM genetic disorder.
 OS Homo sapiens.
 XX WO200157272-A2.
 PD 09-AUG-2001.
 XX 30-JAN-2001; 2001WO-US00663.
 PF 04-FEB-2000; 2000US-0180312.
 PR 26-MAY-2000; 2000US-0207456.

PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0633366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX (MOLE-) MOLECULAR DYNAMICS INC.
 PA Penn SG, Hanzel DK, Chen W, Rank DR;
 PI WPI; 2001-48897/53.
 DR Human genome-derived single exon nucleic acid probes useful for
 XX analyzing gene expression in human placenta -
 XX
 PS Claim 27; SEQ ID No 33602; 654bp; English.
 CC The present invention relates to single exon nucleic acid probes (SENP;
 CC see AAI31315-AA157546). The present sequence is a peptide encoded by one
 CC such probe. The probes are useful for producing a microarray for
 CC predicting, measuring and displaying gene expression in samples derived
 CC from human placenta. The probes are useful for antenatal diagnosis of
 CC human genetic disorders.
 CC
 SQ Sequence 60 AA:
 25.5%; Score 308; DB 22; Length 60;
 Query Match Best Local Similarity 100.0%; Pred. NO. 8.8e-24;
 Matches 60; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 74 RVEEFLSKDISLYLSNKKKFAQTGRTSPVSPESAYTAETTSPPHSDSSSF 133
 |||
 1 rveeflskdislylsnkkkfaqtgtrispvpsesytaettspphsdssitkspdt 60
 Db
 RESULT 6
 AAI32811
 ID AAI32811 standard; Protein; 55 AA.
 AC AAI32811;
 DT 17-OCT-2001 (first entry)
 DE Peptide #6848 encoded by probe for measuring placental gene expression.
 KW Probe; microarray; human; placenta; antenatal diagnosis;
 KM genetic disorder.
 XX Homo sapiens.
 OS
 PN WO200157272-A2.
 PD 09-AUG-2001.
 XX
 PE 30-JAN-2001; 2001WO-US00663.
 XX
 PR 04-FEB-2000; 2000US-0180312.
 PR 26-MAY-2000; 2000US-0207456.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX (MOLE-) MOLECULAR DYNAMICS INC.
 PA Penn SG, Hanzel DK, Chen W, Rank DR;
 PI WPI; 2001-48897/53.
 DR Human genome-derived single exon nucleic acid probes useful for
 XX analyzing gene expression in human placenta -
 XX

XX Claim 27; SEQ ID No 33080; 654bp; English.
 PS
 CC The present invention relates to single exon nucleic acid probes (SENP;
 CC see AAI31315-AA157546). The present sequence is a peptide encoded by one
 CC such probe. The probes are useful for producing a microarray for
 CC predicting, measuring and displaying gene expression in samples derived
 CC from human placenta. The probes are useful for antenatal diagnosis of
 CC human genetic disorders.
 CC
 SQ Sequence 55 AA:
 23.3%; Score 281; DB 22; Length 55;
 Query Match Best Local Similarity 100.0%; Pred. NO. 4.1e-21;
 Matches 55; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 74 RVEEFLSKDISLYLSNKKKFAQTGRTSPVSPESAYTAETTSPPHSDSSSF 128
 |||
 1 rveeflskdislylsnkkkfaqtgtrispvpsesytaettspphsdssit 55
 Db
 RESULT 7
 AAI8938
 ID AAI8938 standard; Protein; 49 AA.
 AC AAI8938;
 DT 12-OCT-2001 (first entry)
 DE Peptide #5372 encoded by probe for measuring cervical gene expression.
 KW Probe; human; microarray; gene expression; cervical epithelial cell;
 KM cervical cancer.
 XX Homo sapiens.
 OS
 PN WO200157278-A2.
 PD 09-AUG-2001.
 XX
 PE 30-JAN-2001; 2001WO-US00670.
 XX
 PR 04-FEB-2000; 2000US-0180312.
 PR 26-MAY-2000; 2000US-0207456.
 PR 30-JUN-2000; 2000US-0608408.
 PR 03-AUG-2000; 2000US-0632366.
 PR 21-SEP-2000; 2000US-0234687.
 PR 27-SEP-2000; 2000US-0236359.
 PR 04-OCT-2000; 2000GB-0024263.
 XX (MOLE-) MOLECULAR DYNAMICS INC.
 PA Penn SG, Hanzel DK, Chen W, Rank DR;
 PI WPI; 2001-48897/53.
 DR Human genome-derived single exon nucleic acid probes useful for
 XX analyzing gene expression in human cervical epithelial cells -
 XX
 PS Claim 27; SEQ ID No 23764; 487bp; English.
 CC The present invention relates to human single exon nucleic acid probes
 CC (SENP; see AAI10068-AA18459). The present sequence is a peptide encoded
 CC by one such probe. The SENPs are derived from human HeLa cells. The SENPs
 CC can be used to produce a single exon microarray, which can be used for
 CC measuring human gene expression in a sample derived from human cervical
 CC epithelial cells. By measuring gene expression, the probes are therefore
 CC useful in grading and/or staging of diseases of the cervix, notably
 CC cervical cancer.
 CC
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic format directly from WIPO
 CC at ftp.wipo.int/pub/published_pct_sequences.

XX CHOI GH, Erwin AL, Hanson MS, Lathigra R;
 XX WPI: 1999-189980/16.
 DR N-PSDB: AAX61632.
 XX New isolated Borrelia burgdorferi nucleic acids - used to develop
 PT products for the diagnosis, prevention and treatment of diseases
 PT caused by Borrelia, particularly Lyme disease
 PS Claim 12, Page 125; 275pp; English.
 CC This sequence represents a Borrelia burgdorferi (Bb) protein of the
 CC invention, which is suitable for use in a vaccine. The Bb polypeptides
 CC can be used in vaccines for eliciting protective antibodies to members of
 CC the Borrelia genus, particularly for the use against Lyme disease in
 CC humans and animals. They can be used for preventing or attenuating an
 CC infection caused by a member of the Borrelia genus. The products can also
 CC be used for detection of members of the Borrelia genus.
 XX Sequence 1087 AA;
 SQ

Query Match 7.4%; Score 89; DB 20; Length 1087;
 Best Local Similarity 22.8%; Pred. No. 7.2;
 Matches 58; Conservative 45; Mismatches 101; Indels 50; Gaps 15;

OY 22 NEKRRPRLSLKLTQDNRPKSKCRP---LMGKVF--YLDLPSTVISEKLQDKIDG---- 72
 DB 217 nnnntalrkissnqkeselppsqtlgkyrypy----syllkelyellddntgrv 272
 OY 73 ---GRVEEFLSKDIS-----YLISNKKKFAQOTL-----GRISP--VSPESAV-- 112
 DB 273 tlgknrlkelikgysnkgfkyvneliensknkeasnl1lltkkdeplnlnpkdpykk 332
 OY 113 -----TAETTSPPHSHD-GSSFKSPDVCISRGKLVKAKID-HDF---PSNLSLSNA 162
 DB 333 elfgldkedkkygledkkskvhskipdientksr-gqakldneflknmpndagaskt 391
 OY 163 LSMGVKTLITDDIRYIYEQ-KKELYLLKKSSTSVRDCG---KRVSGAOKTRGRRLKRP 218
 DB 392 laganxlglnedkkskvhskipdientksrgqakldneflknmpndagasktlagank 451
 OY 219 FVKVEDMSQSPAVH 232
 DB 452 lghledlksk--vh 463

RESULT 14
 AAY19934
 ID AAY19934 standard; Protein; 1119 AA.
 AC AAY19934;
 XX

DT 19-JUL-1999 (first entry)
 DE B. burgdorferi antigenic protein, f742.aa.
 KW Antigenic protein; vaccine; Lyme disease; infection; detection.
 XX Borrelia burgdorferi.
 OS
 XX MO9859071-A1.
 PM
 XX 30-DEC-1998.
 PD
 XX 18-JUN-1998; 98MO-US12718.
 PF
 XX 03-SEP-1997; 97US-0057483.
 PR 20-JUN-1997; 97US-0050359.
 PR 22-JUL-1997; 97US-0053344.
 PR 22-JUL-1997; 97US-0053377.
 XX

PA (HUMA-) HUMAN GENOME SCI INC.
 PA (MEDI-) MEDIMUNE INC.
 XX CHOI GH, Erwin AL, Hanson MS, Lathigra R;
 XX WPI: 1999-189980/16.
 DR N-PSDB: AAX61631.
 XX New isolated Borrelia burgdorferi nucleic acids - used to develop
 PT products for the diagnosis, prevention and treatment of diseases
 PT caused by Borrelia, particularly Lyme disease
 PS Claim 12, Page 124-125; 275pp; English.
 CC This sequence represents a Borrelia burgdorferi (Bb) protein of the
 CC invention, which is suitable for use in a vaccine. The Bb polypeptides
 CC can be used in vaccines for eliciting protective antibodies to members of
 CC the Borrelia genus, particularly for the use against Lyme disease in
 CC humans and animals. They can be used for preventing or attenuating an
 CC infection caused by a member of the Borrelia genus. The products can also
 CC be used for detection of members of the Borrelia genus.
 XX Sequence 1119 AA;
 SQ

Query Match 7.4%; Score 89; DB 20; Length 1119;
 Best Local Similarity 22.8%; Pred. No. 7.6;
 Matches 58; Conservative 45; Mismatches 101; Indels 50; Gaps 15;

OY 22 NEKRRPRLSLKLTQDNRPKSKCRP---LMGKVF--YLDLPSTVISEKLQDKIDG---- 72
 DB 249 nnnntalrkissnqkeselppsqtlgkyrypy----syllkelyellddntgrv 304
 OY 73 ---GRVEEFLSKDIS-----YLISNKKKFAQOTL-----GRISP--VSPESAV-- 112
 DB 305 tlgknrlkelikgysnkgfkyvneliensknkeasnl1lltkkdeplnlnpkdpykk 364
 OY 113 -----TAETTSPPHSHD-GSSFKSPDVCISRGKLVKAKID-HDF---PSNLSLSNA 162
 DB 365 elfgldkedkkygledkkskvhskipdientksr-gqakldneflknmpndagaskt 423
 OY 163 LSMGVKTLITDDIRYIYEQ-KKELYLLKKSSTSVRDCG---KRVSGAOKTRGRRLKRP 218
 DB 424 laganxlglnedkkskvhskipdientksrgqakldneflknmpndagasktlagank 483
 OY 219 FVKVEDMSQSPAVH 232
 DB 484 lghledlksk--vh 495

RESULT 15
 AAR13227
 ID AAR13227 standard; Protein; 700 AA.
 AC AAR13227;
 XX

DT 14-OCT-1991 (first entry)
 DE Novel endoglucanase.
 KW Cellulase activity; detergent.
 XX
 XX Bacillus spp. NCIMB 40250.
 OS
 XX Key Location/Qualifiers
 FH Peptide 1..31
 FT /label- signal sequence
 FT Protein 32..700
 FT /label- mature endoglucanase
 FT Cleavage-site 31..32
 XX MO9110732-A.
 XX

XX	25-JUL1991.
XX	
PF	18-JAN-1991; 91WO-DK00013.
PR	
PR	19-JAN-1990; 90DK-0000164.
XX	
PA	(NOVO) NOVO NORDISK A/S.
XX	
PI	Jorgensen PL, Schulein M, Hansen C;
DR	WPI, 1991-238020/32.
DR	N-PSDB; AAQ13001.
XX	
PT	Enzyme exhibiting cellulase activity from <i>Bacillus</i> sp. - is an
PT	endo-glucanase, esp. useful for harshness redn. of cotton-contg
PT	fabrics.
XX	
PS	Claim 1; Page 80; 96pp; English.
XX	
CC	The enzyme is produced by a strain of <i>Bacillus</i> spp. NCIMB 40250
CC	and exhibits an endoglucanase activity of at least 10 (pref. at
CC	least 25) carboxymethyl cellulose (CMC) endose units per mg to
CC	protein under alkaline conditions. It is especially useful as a
CC	cellulolytic agent and has been found to be more stable during
CC	washing (60 mins. at 40 deg.) in the presence of conventional
CC	detergents than a commercial cellulase preparation. It may also
CC	show increased storage stability in liq. detergents contg.
CC	proteases. The storage was deduced from the DNA (AAQ13001).
CC	See also AARI13228 and AARI13229.
XX	
Q0	Sequence 700 AA;

	Query Match	7.3%	Score 88;	DB 12;	Length 700;
	Best Local Similarity	23.9%	Pred. NO. 4.8;		
	Matches	54;	Conservative	35;	Mismatches 83; Indels 54; Gaps 12.
QY	20 VKNEKNRPSLSKLTQDNREPKSKCPPLWGV-FYLDDPVSITSEKLQDKIDGLGRVEEF	78			
Db	142 vsrdknqpvdes-----etapspvdkvefaknapf-----slqpdlnd--gqv--y	184			
QY	79 LSKDSTYLISNNKKKEKFAQTGRISEPVSPESAVTAETTPSHSDGSFKSPDMVCSLR	138			
Db	185 mdeevnflvnygnastctglkays--ldnepalwet---hprlnpeqlgaelyaks-	238			
QY	139 GKLLVEAKIKCHDFIPSSNLSLMSWCVKILHID-----IRYITEQKKK	184			
Db	239 --lidskvavnd-phaelfgpalryfcgaylsldgapwpslgnyswfdiyldmqm	294			
QY	185 ELYLLKKSSTVRD-----GGKRIV---CGAGOKRTTGSLKRP	218			
Db	295 ahntngkrllvdvlwhwybeagggagylvfvgaaagldtqkavvap	340			

Search completed: December 27, 2001, 16:53:20
Job time: 520 sec

THIS PAGE BLANK (USPTO)